

In the Claims:

Claims 1-56 (canceled).

Claim 57 (previously presented): An integrated circuit comprising:

a semiconductive substrate;

an adhesion material above and physically contacting the substrate;

and

a roughened platinum layer over the adhesion material, the roughened platinum layer having a thickness of greater than or equal to about 100 angstroms and a continuous surface comprising columnar platinum pedestals terminating in dome-shaped tops, the columnar platinum pedestals having heights greater than or equal to about one-third of a total thickness of the platinum layer.

Claim 58 (previously presented): The integrated circuit of claim 57 wherein:

the roughened platinum layer is continuous over an area of the substrate, the area of the substrate comprising at least about 4×10^6 square angstroms; and

the platinum pedestals are at least about 300 angstroms tall within the area.

Claim 59 (previously presented): The integrated circuit of claim 57 wherein the platinum layer comprises hemispherical grain platinum.

Claim 60 (previously presented): The integrated circuit of claim 57 wherein the platinum layer has a thickness of greater than or equal to about 400 angstroms.

Claim 61 (previously presented): The integrated circuit of claim 57 wherein the platinum layer has a thickness of at least about 600 angstroms.

Claim 62 (previously presented): The integrated circuit of claim 57 wherein the adhesion material comprises at least one or more of titanium nitride, iridium, rhodium, ruthenium, platinum, palladium, osmium, silver, rhodium/platinum alloy, IrO₂, RuO₂, RhO₂, or OsO₂.

Claim 63 (previously presented): The integrated circuit of claim 57 wherein the roughened platinum layer is comprised by at least one capacitor electrode, the roughened platinum layer having a thickness of from about 400 angstroms to about 1000 angstroms and comprising platinum pedestals that are at least about 300 angstroms tall and terminate in dome-shaped tops.

Claim 64 (currently amended): The integrated circuit of claim 63 further comprising at least two capacitor ~~electodes~~ electrodes, wherein both capacitor electrodes comprise platinum, but only one of the capacitor electrodes comprises the roughened platinum layer.

Claim 65 (previously presented): The integrated circuit of claim 57 further comprising a diffusion region incorporated with the substrate, the diffusion region physically contacting the adhesion material.

Claim 66 (previously presented): The integrated circuit of claim 57 wherein the platinum layer further comprises rhodium.

Claim 67 (previously presented): The integrated circuit of claim 57 further comprising a dielectric material above the platinum layer.